

**12 VAC 5-640-10 et seq.**

**Alternative Discharging Sewage Treatment Regulations**

**For Individual Single Family Dwellings**

**July 30, 1992**

Part I

General Framework for Regulations

Article 1

General Provisions

**12VAC5-640-10. Authority for regulations.**

Title 32.1 of the Code of Virginia and specifically §§ 32.1-12, 32.1-163 and 32.1-164 provide that the State Board of Health, hereinafter referred to as the board, has the duty to protect the public health and the environment. In order to discharge this duty, the board is empowered to supervise and regulate the construction, location and operation of alternative discharging sewage treatment systems with flows less than or equal to 1,000 gallons per day on a yearly average for an individual single family dwelling within the Commonwealth when such a system is regulated by the Virginia State Water Control Board pursuant to a Virginia Pollutant Discharge Elimination System General Permit.

**12VAC5-640-20. Purpose of regulations.**

These regulations have been promulgated by the State Board of Health to:

1. Ensure that discharging systems are permitted, constructed, and operated in a manner which protects the environment and protects the public welfare, safety and health;
2. Guide the State Health Commissioner in his determination of whether a permit for construction and operation of a discharging system should be issued or denied;
3. Guide the owner or his agent in the requirements necessary to secure a permit for construction of a discharging system;
4. Guide the owner or his agent in the requirements necessary to secure an operation permit following construction;
5. Guide the owner or his agent in the requirements necessary to operate and maintain a discharging system;
6. Guide the State Health Commissioner in his determination of whether a discharging system is being operated in a manner which protects public health and the environment; and

7. Guide the State Health Commissioner in determination of what actions are appropriate to correct violations of this chapter.

**12VAC5-640-30. Scope of regulations.**

A. Systems served. This chapter applies to all alternative discharging sewage treatment systems constructed and operated to serve an individual single family dwelling with flows less than or equal to 1,000 gallons per day on a yearly average. This includes the following systems:

1. New construction. All new discharging systems described above when such system is regulated by the State Water Control Board pursuant to a Virginia Pollutant Discharge Elimination System General Permit.

2. Existing systems with individual VPDES permits. All existing discharging sewage treatment systems, as described above, constructed prior to July 30, 1992, and which were permitted by the State Water Control Board under its VPDES permit program shall be governed by this chapter, except as to the monitoring requirements noted below, effective upon the expiration date of their individual VPDES permit and approval of the owner's registration statement by the SWCB under the General Permit. Upon approval under the General Permit, the owners of such systems need only to comply with the monitoring requirements of the General Permit, and not 12VAC5-640-490 and 12VAC5-640-500, until (i) a change in ownership or (ii) the discharging system violates the effluent limitations of the General Permit for two consecutive quarters, whichever occurs first. After either event, the owner shall comply with 12VAC5-640-490 and 12VAC5-640-500.

3. Existing systems without individual VPDES permits. All existing discharging sewage treatment systems as described above which were operating without a valid VPDES permit on July 30, 1992, shall be governed by this chapter after the owner receives registration statement approval from the SWCB under the General Permit.

B. Upgrading of existing systems. Location criteria contained in this chapter shall not apply to systems legally installed prior to this chapter. When extensive repairs, modifications, or replacement are required to bring a system into compliance with the discharge requirements of the General Permit, a construction permit and temporary operation permit must be obtained by the system owner. The construction permit and temporary operation permit shall be valid for the time specified on its face, at which time the repairs, modifications, or replacement must be completed.

C. Evaluation of other options required. The department will not issue a permit to construct a discharging system, unless all options for onsite sewage treatment and disposal have been

evaluated and found unsatisfactory. The consideration of all options include site evaluation(s) by the department and when appropriate, a report prepared by a person having a special knowledge of soil science as defined in § 54.1-2200 of the Code of Virginia and the methods and principles of soil evaluation as acquired by education or experience in the formation, description and mapping of soils indicating that no sewage disposal site exists on that property. Options include a conventional onsite septic system using a pump, low pressure distribution (LPD), or an elevated sand mound or other systems which may be approved by the department under the Sewage Handling and Disposal Regulations, 12VAC5-600-10 et seq.

#### **12VAC5-640-40. Relationship to the Virginia Sewage Handling and Disposal Regulations.**

This chapter is supplemental to the Sewage Handling and Disposal Regulations (12VAC5-600-10 et seq.) which govern the treatment and disposal of sewage utilizing onsite systems. The Sewage Handling and Disposal Regulations shall govern the materials and construction practices used to install alternative discharging sewage treatment systems and all appurtenances associated with systems including but not limited to pipes and fittings whenever specifications are not contained in this chapter.

#### **12VAC5-640-50. Relationship to the proposed Sewage Collection and Treatment Regulations.**

The proposed Sewage Collection and Treatment Regulations, upon final adoption, shall be used to establish design and construction criteria for systems, and portions of systems, not otherwise explicitly regulated within this chapter or the Sewage Handling and Disposal Regulations, 12VAC5-610-10 et seq. Prior to the adoption of the Sewage Collection and Treatment Regulations, the Sewerage Regulations, 12VAC5-580-10 et seq., shall be used in their place.

#### **12VAC5-640-60. Relationship to the State Water Control Board.**

This chapter contains administrative procedures and construction, location, monitoring and maintenance requirements which are supplementary to the State Water Control Board's VPDES General Permit Regulation for domestic sewage discharges less than or equal to 1,000 gallons per day. This chapter applies only to individual single family dwellings with flows less than or equal to 1,000 gallons per day on a yearly average registered under this General Permit. Single family dwellings are a subset of the systems regulated by the State Water Control Board under this General Permit.

### **12VAC5-640-70. Relationship to the Uniform Statewide Building Code.**

This chapter is independent of, and in addition to, the requirements of the Uniform Statewide Building Code. All persons having obtained a construction permit under this chapter shall furnish a copy of the permit to the local building official, upon request, when making application for a building permit. Prior to obtaining an occupancy permit, an applicant shall furnish the local building official with a copy of the operation permit demonstrating the system has been inspected and approved by the district or local health department.

### **12VAC5-640-80. Administration of regulations.**

This chapter is administered by the following:

1. The State Board of Health has the responsibility to promulgate, amend, and repeal regulations necessary to ensure the proper construction, location and operation of discharging systems.

2. The State Health Commissioner, hereinafter referred to as the commissioner, is the chief executive officer of the State Department of Health. The commissioner has the authority to act, within the scope of regulations promulgated by the board, and for the board when it is not in session. The commissioner may delegate his powers under this chapter in writing to any subordinate, with the exception of (i) his power to issue variances under § 32.1-12 of the Code of Virginia and 12VAC5-640-170, (ii) his power to issue orders under § 32.1-26 of the Code of Virginia and 12VAC5-640-140 and 12VAC5-640-150, and (iii) the power to suspend or revoke construction and operation permits under 12VAC5-640-280, which may only be delegated pursuant to 12VAC5-640-330.

The commissioner has final authority to adjudicate contested case decisions of subordinates delegated powers under this section prior to appeal of such case decisions to the circuit court.

3. The State Department of Health, hereinafter referred to as the department, is designated as the primary agent of the commissioner for the purpose of administering this chapter.

4. The district or local health departments are responsible for implementing and enforcing the regulatory activities required by this chapter.

### **12VAC5-640-90. Right of entry and inspections.**

In accordance with the provisions of §§ 32.1-25 and 32.1-164 of the Code of Virginia, the commissioner or his designee shall have the right to enter any property to ensure compliance with this chapter

Article 2  
Definitions

**12VAC5-640-100. Definitions.**

The following words and terms, when used in this chapter, shall have the following meaning unless the context clearly indicates otherwise.

"Aerobic treatment unit" or "ATU" means any mechanical sewage treatment plant, designed to treat sewage from a single family dwelling utilizing the process of extended aeration with or without a means to return sludge to the aeration chamber.

"Agent" means a legally authorized representative of the owner.

"All weather stream" means any stream which will, at all times, dilute point source discharge effluent (from a pipe) at least 10:1 as measured during a 7 consecutive day average of a 10 year low flow (7-Q-10).

"Alternative discharging sewage treatment system" or "discharging system" means any device or system which results in a point source discharge of treated sewage for which the Department of Health may issue a permit authorizing construction and operation when such system is regulated by the SWCB pursuant to a general VPDES permit issued for an individual single family dwelling with flows less than or equal to 1,000 gallons per day on a yearly average. Such a system is designed to treat sewage from a residential source and dispose of the effluent by discharging it to an all weather stream, an intermittent stream, a dry ditch, or other location approved by the department.

"Commissioner" means the State Health Commissioner or his subordinate who has been delegated powers in accordance with 12VAC5-640-80 2 of this chapter.

"Disinfection" means the reduction of pathogenic organisms to a level that complies with the discharge limits of the general permit.

"District health department" means a consolidation of local health departments as authorized in § 32.1-31 C of the Code of Virginia.

"Division" means the Division of Sanitarian Services.

"Dry ditch" means a naturally occurring (i.e., not man made) swale or channel which ultimately leads to an all weather stream. A dry ditch may have observable flow during or immediately after a storm event or snow melt. For the purposes of this chapter all dry ditches shall have a well defined natural channel with sides that have at least a 1:10 (rise:run) slope.

"Family" means the economic unit which shall include the owner, the spouse of the owner, and any other person actually and properly dependent upon or contributing to the family's income for subsistence.

A husband and wife who have been separated and are not living together, and who are not dependent on each other for support, shall be considered separate family units.

The family unit which is based on cohabitation is considered to be a separate family unit for determining if an application fee is waivable. The cohabitating partners and any children shall be considered a family unit.

"Failing alternative discharging sewage treatment system" means any alternative discharging sewage treatment system which either fails to discharge due to exfiltration or discharges effluent having a BOD<sub>5</sub> suspended solids, pH, chlorine residual, dissolved oxygen or fecal coliform greater than allowed by the General Permit as measured at the outfall. However, chlorine residual and dissolved oxygen content shall not be used for the purposes of determining whether a particular class of discharging systems complies with the requirements of 12VAC5-640-380.

"Failing onsite sewage disposal system" means an onsite sewage disposal system that is backing up in a house, or is discharging untreated or partially treated effluent on the ground surface, into surface waters, or into ground water.

"Five-day biochemical oxygen demand (BOD<sub>5</sub>)" means the quantity of oxygen used in the biochemical oxidation of organic matter in five days at 20°C under specified conditions and expressed as milligrams per liter (mg/l).

"General Permit" means a Virginia Pollutant Discharge Elimination System ("VPDES") General Permit for domestic sewage discharges less than or equal to 1,000 gallons per day on a yearly average issued by the State Water Control Board.

"Generic system design" means nonsite specific plans and specifications for a system designed to treat sewage flows of 1,000 GPD or less, or an equivalent BOD<sub>5</sub> loading rate, which have been reviewed and approved by the division for uses governed by this chapter.

"Income" means total cash receipts of the family before taxes from all sources. These include money wages and salaries before any deductions, but do not include food or rent in lieu of wages. These receipts include net receipts from nonfarm or farm self-employment (e.g., receipts from own business or farm after deductions for business or farm expenses). They include regular payments from public assistance (including Supplemental Security Income), social security or railroad retirement, unemployment and worker's compensation, strike benefits

from union funds, veterans' benefits, training stipends, alimony, child support, and military family allotments or other regular support from an absent family member or someone not living in the household; private pensions, government employee pensions, and regular insurance or annuity payment; and income from dividends, interest, rents, royalties, or periodic receipts from estates or trusts. These receipts further include funds obtained through college work study programs, scholarships, and grants to the extent said funds are used for current living costs. Income does not include the value of food stamps, WIC checks, fuel assistance, money borrowed, tax refunds, gifts, lump sum settlements, inheritances or insurance payments, withdrawal of bank deposits, earnings of minor children, or money received from the sale of property. Income also does not include funds derived from college work study programs, scholarships, loans, or grants to the extent such funds are not used for current living costs.

"Intermittent sand filter system" means a system designed to treat sewage by causing the sewage to be dosed through a properly designed bed of graded sand media.

"Intermittent stream" means any stream which cannot, at all times, dilute point source discharge effluent (from a pipe) at least 10:1 as measured during a 7 consecutive day average of a 10 year low flow (7-Q-10).

"Local health department" means the department established in each city and county in accordance with § 32.1-30 of the Code of Virginia.

"Onsite sewage disposal system" means a sewerage system or treatment works designed not to result in a point source discharge.

"Owner" means any person, who owns, leases, or proposes to own or lease an alternative discharging sewage treatment system.

"Person" means any and all persons, including individuals, firms, partnerships, associations, public or private institutions, municipalities or political subdivisions, governmental agencies, or private or public corporations organized under the law of this Commonwealth or any other state or country.

"Proprietary system design" means any group of discharging sewage treatment systems manufactured and installed following substantially similar engineering plans and specifications designed to treat a specific volume of sewage or BOD<sub>5</sub> loading rate as determined by the division.

"Pump and haul" means the temporary (less than one year) disposal of sewage conducted under a valid pump and haul permit issued in accordance with the Sewage Handling and Disposal Regulations.

"Recirculating sand filter system" means a system which treats sewage effluent by repeatedly passing the sewage through a pump chamber and sand filter to achieve alternating wetting and drying cycles.

"Sanitary survey" means an investigation of any condition that may effect public health.

"Settleable solids" means solids which settle after 30 minutes and expressed as milligrams per liter (mg/l).

"Sewage" means water carried and nonwater carried human excrement, kitchen, laundry, shower, bath, or lavatory wastes separately or together with such underground, surface, storm and other water and liquid industrial wastes as may be present from residences, buildings, vehicles, industrial establishments or other places.

"Sewer" means any sanitary or combined sewer used to convey sewage or municipal or industrial wastes.

"Site sketch" means a scale drawing of a proposed site for a discharge system, with pertinent distances shown. The scale shall typically be 1" = 50' for lots of three acres or less and 1" = 100' for larger lots. Site sketches may be made by the homeowner or any agent for the homeowner.

"Subdivision" means multiple building lots derived from a parcel(s) of land in conformance with local zoning or subdivision requirements.

"Subsurface soil absorption" means a process which utilizes the soil to treat and dispose of sewage effluent.

"SWCB" means the State Water Control Board and its designees.

"Total suspended solids" means solids in effluent samples which can be removed readily by standard filtering procedures in a laboratory and expressed as mg/l.

"Variance" means a conditional waiver of a specific regulation which is granted to a specific owner relating to a specific situation or facility and may be for a specified time period.

"VPDES permit" means a Virginia Pollutant Discharge Elimination System permit issued by the SWCB under the authority of the federal NPDES program.

"Well" means any artificial opening or artificially altered natural opening, however made, by which ground water is sought or through which ground water flows under natural pressure or is intended to be artificially drawn; provided this definition shall not include wells drilled for the following purposes: (i) exploration or production of oil or gas, (ii) building foundation



investigation and construction, (iii) elevator shafts, (iv) grounding of electrical apparatus, or (v) the modification or development of springs.

Part II  
Procedural Regulations  
Article 1  
Procedures

**12VAC5-640-110. Compliance with the Administrative Process Act.**

The provisions of the Virginia Administrative Process Act (§ 9-6.14:1 et seq. of the Code of Virginia) shall govern the promulgation and administration of this chapter and shall be applicable to the appeal of any case decision based upon this chapter.

**12VAC5-640-120. Powers and procedures of regulations not exclusive.**

The commissioner may enforce this chapter through any means lawfully available.

**12VAC5-640-130. Effective date of regulations.**

The effective date of these regulations is July 30, 1992. Those permits issued under the emergency regulation VR355-34-400 are hereby recognized as modified, valid and covered by these regulations.

**12VAC5-640-140. Emergency order.**

If an emergency exists the commissioner may issue an emergency order as is necessary for preservation of public health, safety, and welfare or to protect environmental resources. The emergency order shall state the reasons and precise factual basis upon which the emergency order is issued. The emergency order shall state the time period for which it is effective. Emergency orders will be publicized in a manner deemed appropriate by the commissioner. The provisions of 12VAC5-640-150 C and D shall not apply to emergency orders issued pursuant to this section.

**12VAC5-640-150. Enforcement of regulations.**

A. Notice. Subject to the exceptions below, whenever the commissioner or the district or local health department has reason to believe a violation of any of this chapter has occurred or is occurring, the alleged violator shall be notified. Such notice shall be made in writing, shall be delivered personally or sent by certified mail, shall cite the regulation or regulations that are allegedly being violated, shall state the facts which form the basis for believing the violation has occurred or is occurring, shall include a request for a specific action by the recipient by a specified time and shall state the penalties associated with such violation. When the commissioner deems it necessary, he may initiate criminal prosecution or seek civil relief through mandamus or injunction prior to giving notice.

B. Orders. Pursuant to the authority granted in § 32.1-26 of the Code of Virginia, the commissioner may issue orders to require any owner, or other person, to comply with the provisions of this chapter. The order shall be signed by the commissioner and may require:

1. The immediate cessation and correction of the violation;
2. Appropriate remedial action to ensure that the violation does not recur;
3. The submission of a plan to prevent future violation to the commissioner for review and approval;
4. The submission of an application for a variance; or
5. Any other corrective action deemed necessary for proper compliance with the chapter.

C. Hearing before the issuance of an order. Before the issuance of an order described in 12VAC5-640-150 B, a hearing must be held, with at least 30 days notice by certified mail to the affected owner or other person of the time, place and purpose thereof, for the purpose of adjudicating the alleged violation or violations of this chapter. The procedures at the hearing shall be in accordance with 12VAC5-640-180 A and B and with §§ 9-6.14:11 through 9-6.14:14 of the Code of Virginia.

D. Order - when effective. All orders issued pursuant to 12VAC5-640-150 B shall become effective not less than 15 days after mailing a copy thereof by certified mail to the last known address of the owner or person violating this chapter. Violation of an order is a Class 1 misdemeanor. See § 32.1-27 of the Code of Virginia.

E. Compliance with effective orders. The commissioner may enforce all orders. Should any owner or other person fail to comply with any order, the commissioner may:

1. Apply to an appropriate court for an injunction or other legal process to prevent or stop any practice in violation of the order;
2. Commence administrative proceedings to suspend or revoke the applicable permit;
3. Request the Attorney General to bring an action for civil penalty, injunction, or other appropriate remedy; or
4. Request the commonwealth attorney to bring a criminal action.

F. Not exclusive means of enforcement. Nothing contained in 12VAC5-640-140 or 12VAC5-640-150 shall be interpreted to require the commissioner to issue an order prior to commencing administrative proceedings or seeking enforcement of any regulations or statute through an injunction, mandamus or criminal prosecution.

**12VAC5-640-160. Suspension of regulations during disasters.**

If, in the case of a man-made or natural disaster, the commissioner finds that certain regulations cannot be complied with and that the public health is better served by not fully complying with this chapter, he may authorize the suspension of the application of this chapter for specifically affected localities and institute a provisional regulatory plan until the disaster is abated.

**12VAC5-640-170. Variances.**

Only the commissioner or the deputy commissioners may grant a variance to this chapter. (See §§ 32.1-12 and 32.1-22 of the Code of Virginia and 12VAC5-640-80 2.) The commissioner or the deputy commissioners shall follow the appropriate procedures set forth in this subsection in granting a variance.

A. Requirements for a variance. The commissioner may grant a variance if a thorough investigation reveals that the hardship imposed by this chapter outweighs the benefits that may be received by the public. Further, the granting of such a variance shall not subject the public to unreasonable health risks or jeopardize environmental resources.

B. Application for a variance. Any owner who seeks a variance shall apply in writing within the time period specified in 12VAC5-640-210 B. The application shall be signed by the owner, addressed and sent to the commissioner at the State Department of Health in Richmond. The application shall include:

1. A citation to the regulation from which a variance is requested;
2. The nature and duration of the variance requested;
3. Any relevant analytical results including results of relevant tests conducted pursuant to the requirements of this chapter;
4. Statements or evidence why the public health and welfare and environmental resources would not be degraded if the variance were granted;
5. Suggested conditions that might be imposed on the granting of a variance that would limit the detrimental impact on the public health and welfare or environmental resources;
6. Other information, if any, believed pertinent by the applicant; and
7. Such other information as the district or local health department or commissioner may require.

C. Evaluation of a variance application.

1. The commissioner shall act on any variance request submitted pursuant to 12VAC5-640-170 B within 60 calendar days of receipt of the request.
2. In the evaluation of a variance application, the commissioner shall consider the following factors:
  - a. The effect that such a variance would have on the construction, location, or operation of the discharging system;
  - b. The cost and other economic considerations imposed by this requirement;
  - c. The effect that such a variance would have on protection of the public health;
  - d. The effect that such a variance would have on protection of environmental resources; and
  - e. Such other factors as the commissioner may deem appropriate.

D. Disposition of a variance request.

1. The commissioner may deny any application for a variance by sending a denial notice to the applicant by certified mail. The notice shall be in writing and shall state the reasons for the denial.
2. If the commissioner proposes to grant a variance request submitted pursuant to 12VAC5-640-170 B the applicant shall be notified in writing of this decision. Such notice shall identify the variance, discharging system covered, and shall specify the period of time for which the variance will be effective. The effective date of a variance shall be as stated in the variance.
3. No owner may challenge the terms or conditions set forth in the variance after 30 calendar days have elapsed from the effective date of the variance.

E. Posting of variances. All variances granted to any discharging sewage treatment system are transferable from owner to owner unless otherwise stated. Each variance shall be attached to the permit to which it is granted. Each variance is revoked when the permit to which it is attached is revoked.

F. Hearings on disposition of variances. Subject to the time limitations specified in 12VAC5-640-210, hearings on denials of an application for a variance or on challenges to the terms and conditions of a granted variance may be held pursuant to 12VAC5-640-180 A or B, except that informal hearings under 12VAC5-640-180 A shall be held before the commissioner or his designee.

### **12VAC5-640-180. Hearing types.**

Hearings before the commissioner or the commissioner's designees shall include any of the following forms depending on the nature of the controversy and the interests of the parties involved.

A. Informal hearings. An informal hearing is a meeting with a district or local health department with the district or local health director presiding and held in conformance with § 9-6.14:11 of the Code of Virginia. The district or local health department shall consider all evidence presented at the meeting which is relevant to the issue in controversy. Presentation of evidence, however, is entirely voluntary. The district or local health department shall have no subpoena power. No verbatim record need be taken at the informal hearing. The local or district health director shall review the facts presented and based on those facts render a decision. A written copy of the decision and the basis for the decision shall be sent to the appellant within 15 work days of the hearing, unless the parties mutually agree to a later date in order to allow the department to evaluate additional evidence. If the decision is adverse to the interests of the appellant, an aggrieved appellant may request an adjudicatory hearing pursuant to 12VAC5-640-180 B.

B. Adjudicatory hearing. The adjudicatory hearing is a formal, public adjudicatory proceeding before the commissioner, or a designated hearing officer, and held in conformance with § 9-6.14:12 of the Code of Virginia. An adjudicatory hearing includes the following features:

1. Notice. Notice which states the time and place and the issues involved in the prospective hearing shall be sent to the owner or other person who is the subject of the hearing. Notice shall be sent by certified mail at least 15 calendar days before the hearing is to take place.
2. Record. A record of the hearing shall be made by a court reporter. A copy of the transcript of the hearing, if transcribed, will be provided within a reasonable time to any person upon written request and payment of the cost.
3. Evidence. All interested parties may attend the hearing and submit oral and documentary evidence and rebuttal proofs, expert or otherwise, that are material and relevant to the issues in controversy. The admissibility of evidence shall be determined in accordance with § 9-6.14:12 of the Code of Virginia.
4. Counsel. All parties may be accompanied by and represented by counsel and are entitled to conduct such cross-examination as may elicit a full and fair disclosure of the facts.

5. Subpoena. Pursuant to § 9-6.14:13 of the Code of Virginia, the commissioner or hearing officer may issue subpoenas on behalf of himself or any person or owner for the attendance of witnesses and the production of books, papers or maps. Failure to appear or to testify or to produce documents without adequate excuse may be reported by the commissioner to the appropriate circuit court for enforcement.

6. Judgment and final order. The commissioner may designate a hearing officer or subordinate to conduct the hearing as provided in § 9-6.14:12 of the Code of Virginia, and to make written recommended findings of fact and conclusions of law to be submitted for review and final decision by the commissioner. The final decision of the commissioner shall be reduced to writing and will contain the explicit findings of fact upon which his decision is based. Certified copies of the decision shall be delivered to the owner affected by it. Notice of a decision will be served upon the parties and become a part of the record. Service may be by personal service or certified mail return receipt requested.

#### **12VAC5-640-190. Request for hearing.**

A request for an informal hearing shall be made by sending the request in writing to the district or local health department. A request for an adjudicatory hearing shall be made in writing and directed to the commissioner at the State Department of Health in Richmond. Requests for hearings shall cite the reason(s) for the hearing request and shall cite the section(s) of this chapter involved.

#### **12VAC5-640-200. Hearing as a matter of right.**

Except as provided in 12VAC5-640-330, any owner or other person whose rights, duties, or privileges have been, or may be affected by any decision of the board or its subordinates in the administration of this chapter shall have a right to both informal and adjudicatory hearings. The commissioner may require participation in an informal hearing before granting the request for a full adjudicatory hearing. Exception: No person other than an owner shall have the right to an adjudicatory hearing to challenge the issuance of either a construction permit or operation permit unless the person can demonstrate at an informal hearing that the minimum standards contained in this chapter have not been applied and that he will be injured in some manner by the issuance of the permit.

#### **12VAC5-640-210. Appeals.**

Any appeal from a denial of a construction or operation permit for a discharging system must be made in writing and received by the department within 60 days of the date of the denial.

A. Any request for hearing on the denial of an application for a variance pursuant to 12VAC5-640-170 D 1 must be made in writing and received within 60 days of receipt of the denial notice.

B. Any request for a variance must be made in writing and received by the department prior to the denial of the discharging system permit, or within 60 days after such denial.

C. In the event a person applies for a variance within the 60-day period provided by subsection B above, the date for appealing the denial of the permit, pursuant to subsection A of this section, shall commence from the date on which the department acts on the request for a variance.

D. Pursuant to the Administrative Process Act (§ 9-6.14:1 et seq. of the Code of Virginia) an aggrieved owner may appeal a final decision of the commissioner to an appropriate circuit court.

**12VAC5-640-220. Permits; general.**

A. Construction permit required. After July 30, 1992, no person shall construct, alter, rehabilitate, modify or extend a discharging system or allow the construction, alteration, rehabilitation, or extension of a discharging system, without a written construction permit from the commissioner. Furthermore, except as provided in 12VAC5-640-30 A 2 and 12VAC5-640-220 B, no person or owner shall cause or permit any discharging system to be operated without a written operation permit issued by the commissioner which authorizes the operation of the discharging system. Conditions may be imposed on the issuance of any construction or operation permit and no discharging system shall be constructed or operated in violation of those conditions.

B. Operation permit required. Except as provided in 12VAC5-640-310, no person shall place a discharging system in operation, or cause or allow a discharging system to be placed in operation, without obtaining a written operation permit.

C. Construction permits validity. Except as provided in 12VAC5-640-30, 12VAC5-640-280 and 12VAC5-640-290, construction permits for a discharging system with general or preliminary system approval shall be deemed valid for a period of 54 months from the date of issuance. Construction permits for discharging systems with experimental approval shall be valid for 30 days except as provided in 12VAC5-640-30, 12VAC5- 640-280 and 12VAC5-640-290.

D. Operation permit validity. Except as provided for in 12VAC5-640-280, operation permits shall be valid for a period of time not longer than the General Permit and the maintenance contract required pursuant to 12VAC5-640-500 B or the monitoring contract required pursuant to 12VAC5-640-490 F, whichever expires first. The operation permit may be renewed upon



written proof of a new or renewed maintenance contract or monitoring contract provided they are all valid for not less than 24 months. The period of renewal shall coincide with the expiration date of the document with the shortest period of validity.

E. Permits not transferable. Construction and operation permits for discharging systems shall not be transferable from one person to another or from one location to another. Each new owner shall make a written application for a permit. Application forms are available at all local health departments.

#### **12VAC5-640-230. Procedures for obtaining a construction permit.**

The process for obtaining a construction permit for a discharging system consists of two steps. These are filing an application with fee to determine the suitability of a site and filing plans for the type of system being proposed.

A. Application fees. A fee of \$50 shall be charged to the owner for filing an application for an alternative discharging sewage treatment system permit with the department. The fee shall be paid to the Virginia Department of Health by the owner or his agent at the time of filing the application and the application shall not be processed until the fee has been collected. Applications shall be limited to one site specific proposal. When site conditions change, or the needs of an applicant change, or the applicant proposes and requests another site be evaluated, and a new site evaluation is conducted, a new application and fee are required.

1. Waiver of fees. An owner whose income of his family is at or below the 1988 Poverty Income Guidelines For All States (Except Alaska and Hawaii) And The District of Columbia established by the Department of Health and Human Services, 53 FR 4213 (1988), or any successor guidelines, shall not be charged a fee for filing an application for an alternative discharging sewage treatment system permit.

2. Determining eligibility.

- a. An owner seeking a waiver of an application fee shall request the waiver on the application form. The department will require information as to income, family size, financial status and other related data. The department shall not process the application until final resolution of the eligibility determination for waiver.

- b. It is the owner's responsibility to furnish the department with the correct financial data in order to be appropriately classified according to income level and to determine eligibility for a waiver of an application fee. The owner shall be required to provide written verification of income such as check stubs, written letter from an employer, W-2 forms, etc., in order to provide documentation for the application.

c. The proof of income must reflect current income which is expected to be available during the next 12-month period. Proof of income must include: name of employer, amount of gross earnings, pay period for stated earnings. If no pay stub, a written statement must include the name, address, telephone number and title of person certifying the income.

B. Written application required. Construction permits are issued by the authority of the commissioner. All requests for construction permits for discharging systems shall be by written application, signed by the owner or his agent, and shall be directed to the district or local health department. All applications shall be made on the application form (Virginia Department of Health Discharging System Application Form for Single Family Dwellings Discharging Sewage Treatment Systems with Flows Less Than or Equal To 1,000 Gallons Per Day and State Water Control Board Virginia Pollutant Discharge Elimination System General Permit Registration Statement for Domestic Sewage Discharge Less Than or Equal to 1,000 Gallons Per Day).

C. Application completeness. An application shall be deemed complete upon receipt by the district or local health department of a signed and dated application, together with the appropriate fee, containing the following information:

1. The property owner's name, address, and telephone number;
2. The applicant's name, address, and phone number (if different from subdivision 1 of this subsection);
3. A statement signed by the property owner, or his agent, granting the Health Department access to the site for the purposes of evaluating the suitability of the site for a discharging system and allowing the department access to inspect the construction, maintenance and operation of the discharging system after it is installed. The applicant must secure and produce written permission for the department to enter on any property necessary to evaluate the application;
4. A site sketch showing the location of existing or proposed houses, property boundaries, existing and proposed wells, actual or proposed discharging systems within 600 feet of the discharge point, recorded easements, the slope and side slope of any proposed dry ditch channels, setback distances of proposed system components (such as ATU's, sandfilters, and dry ditches) to property lines, wells and other discharging systems public water supply intakes, and swimming or recreational water use areas within five miles. The drawing should be approximately to scale

(plus or minus 10%) or drawn on a United States Geological Survey 7.5 minute topographic map;

5. A written statement from the SWCB that the owner's registration statement has been approved under the General Permit regulation;

6. Copies of all easements required by 12VAC5-640-450 B; however, at the discretion of the district health director or the district sanitarian, the submission of easements may be postponed until submission of the construction plan if the property owner submits the name, address and property location of each person that must grant an easement to the owner; and

7. Other information which the department deems necessary to comply with the intent of this chapter.

D. Application assistance. It is the policy of the department to assist persons applying for a discharging system permit by maintaining a supply of all appropriate forms in each local office. Department personnel will assist individuals in understanding how to fill out the form and provide information on the administrative process and technical requirements involved in obtaining a permit.

E. Site review. Upon receipt of a completed application the department will conduct a site review to determine if the site meets the minimum siting criteria contained in Part III of this chapter. Upon completing the site evaluation the department will advise the owner in writing of the results of the evaluation.

1. Satisfactory site found. When a satisfactory site is found for a discharging system, the written notice to the applicant shall include the type of discharge point found (i.e., all weather stream, intermittent stream, or dry ditch).

2. No satisfactory site found. When no satisfactory site is found the owner shall be notified of all limiting factors restricting the use of a discharging system. Further, the applicant shall be notified of his right to appeal and what steps are necessary to initiate the process.

#### **12VAC5-640-240. Construction plan.**

After a satisfactory site for a discharging system has been found, the applicant shall submit a construction plan. The purpose of the construction plan is to demonstrate how the effluent limitations established by the SWCB and the remaining criteria of this chapter can be met. At a minimum the construction plan must show the following:

1. Type of system. The type of system and, where applicable, the manufacturer, model number, NSF approval, and hydraulic capacity and capacity in pounds of BOD<sub>5</sub> per day;

2. Location. The specific location of the property including the county tax map number (where available), a copy of the United States Geological Survey 7.5 minute topographic map showing the discharge point and down stream for one mile, and directions to the property;

3. Grades. The elevation of the house sewer line where it exits the house and the elevation of the inlet and outlet ports or tees on all treatment units. Where discharges are to dry ditches or intermittent streams the site plan shall show the elevation of the discharge point, the point 500' downgrade from the discharge point and points every 50 feet between the discharge point and 500' downstream. This requirement may be met by drawing a flow diagram showing all elements listed above;

4. Distances. The distance between all elevation points required by 12VAC5-640-240 3 so that the grade and setback distances can be established;

5. Pump specifications. If a pump is proposed, specifications must be provided which include the manufacturer, model number, and a pump curve;

6. Flood plain. The location of the 100-year flood plain. All portions of a discharging system, except for the discharge pipe and step type post aeration, if required, shall be located above the 100-year flood plain;

7. Plans and specifications. Plans and specifications showing compliance with subsections B through N (inclusive) of 12VAC5-640-470.

#### **12VAC5-640-250. Issuance of the construction permit.**

A construction permit shall be issued to the owner by the commissioner after receipt and review of a complete application submitted under 12VAC5-640-230 and a satisfactory site and construction plan review and approval under 12VAC5-640-240. The construction permit shall note whether the permitted system has experimental, preliminary, or general approval. Further, the construction permit will indicate that the operation and maintenance of the system is the owner's responsibility and that discharges in excess of the limits established by the General Permit, now or in the future, may cause the department to mandate the repair, expansion or replacement of the discharging system.

#### **12VAC5-640-260. Exception for failing onsite sewage disposal systems.**

When a failing onsite sewage disposal system is identified, and the site location criteria in this chapter cannot be met, the site location criteria in Article 1 of Part III and 12VAC5-640-240

F, 12VAC5-640-470 H and the dimensions of the easement specified in 12VAC5-640-450 B of this chapter may be waived, provided the following conditions are met.

A. Reduce health hazard or environmental impact.

The issuance of a discharging system permit will reduce an existing health hazard or will improve or negate environmental impacts associated with the existing discharge. This determination shall be made by the district health director or the district sanitarian manager.

B. No increase in waste load.

There will be no increase in the waste load generated by any additions to the dwelling except when necessary to provide for minimum facilities necessary for good sanitation. The minimum facilities for a single family dwelling are: a water closet, a bathroom sink, a bathtub or shower or both, and a kitchen sink. More than one bathroom may be added to a dwelling provided the potential occupancy of the structure is not increased.

C. Minimum facilities.

Where a failing onsite sewage disposal system already has more than the minimum facilities described above, the discharging system may be designed and permitted to accommodate the entire existing sewage flow. In no event shall the system designed and permitted exceed the existing sewage flow unless all conditions and criteria of this chapter are met.

**12VAC5-640-270. Denial of a construction or operation permit.**

A. Construction permit.

If it is determined that the proposed site does not comply with this chapter or that the design of the system would preclude the safe and proper operation of a discharging system, or that the installation and operation of the system would create an actual or potential health hazard or nuisance, or the proposed design would adversely impact the environment, the permit shall be denied and the owner shall be notified in writing, by certified mail, of the basis for the denial. The notification shall also state that the owner has the right to appeal the denial.

B. Operation permit.

In addition to the grounds set forth in 12VAC5-640-270 A, the operation permit shall be denied if the discharging system is not constructed in accordance with the construction permit or the owner has failed to provide the completion statement required by 12VAC5-640-300, or a copy of a valid maintenance contract required by 12VAC5-640-500 or a valid monitoring contract as required in 12VAC5-640-490 F. The owner shall be notified in writing, by certified

mail, of the basis for the denial. The notification shall also state that the owner has the right to appeal the denial.

**12VAC5-640-280. Suspension or revocation of construction permits and operation permits.**

The commissioner may suspend or revoke a construction permit or operation permit for any of the following reasons:

1. Failure to comply with the conditions of the permit including, but not limited to, the monitoring and maintenance requirements in Article 4 of Part III of this chapter and the payment of the inspection fee under 12VAC5-640-320;

2. Failure to keep a maintenance contract in force in accordance with 12VAC5-640-500, or keep a monitoring contract in force in accordance with 12VAC5-640-490 F;

3. Violation of any of this chapter for which no variance has been issued;

4. Facts become known which reveal that an actual or potential health hazard has been or would be created or that the environmental resources may be adversely affected by allowing the proposed discharging system to be installed or operated; or

5. Failure to comply with the effluent limitations set forth by the SWCB in the General Permit as determined by the monitoring required by Article 4 of Part III.

**12VAC5-640-290. Voidance of construction permits.**

A. Null and void.

All discharging system construction permits are null and void when any of the following conditions occur:

1. Conditions such as house location, well location, discharging system location, discharge point, discharge system design, topography, drainage ways, or other site conditions are changed from those shown on the application or site plan;

2. Conditions are changed from those shown on the construction permit;

3. More than 54 months elapse from the date the permit was issued; or

4. The suspension, revocation or expiration of the General Permit or of the owner's approved registration by the SWCB.

B. Reapplication.

Reapplication for the purposes of having an expired construction permit reissued shall be the responsibility of the owner, and such reapplication shall be handled as an initial application and comply fully with 12VAC5-640-230.

**12VAC5-640-300. Statement required upon completion of construction.**

Upon completion of the construction, alteration, or rehabilitation of a discharging system, the owner or agent shall submit to the district or local health department a statement, signed by the contractor, upon the form set out in Appendix II, that the system was installed and constructed in accordance with the permit, and further that the system complies with all applicable state and local regulations, ordinances and laws.

**12VAC5-640-310. Inspection and correction.**

No discharging system shall be placed in operation, except for the purposes of testing the mechanical soundness of the system, until inspected by the district or local health department, corrections made if necessary, and the owner has been issued an operation permit by the district or local health department.

**12VAC5-640-320. Issuance of the operation permit.**

Upon satisfactory completion of the requirements of 12VAC5-640-300, 12VAC5-640-310, 12VAC5-640-490 F and 12VAC5-640-500 B, the commissioner shall issue an operation permit to the owner. The issuance of an operation permit does not denote or imply any warranty or guarantee by the department that the discharging system will function for any specified period of time. The operation permit shall note whether the permitted system has experimental, preliminary, or general approval. Further, the operation permit will indicate that the operation and maintenance of the system is the owner's responsibility and that discharges in excess of the limits established by the General Permit, now or in the future, may cause the department to mandate the repair, expansion or replacement of the discharging system.

A. Inspection fees. A fee of \$50 shall be charged to the owner for each mandatory monitoring inspection of an alternative discharging sewage treatment system conducted by the department in accordance with 12VAC5-640-490 C, D, or E. The fee shall be paid to the Virginia Department of Health by the owner or his agent prior to receipt of the inspection results from the department. Each inspection fee shall apply to one site specific inspection of only one discharging system.

B. Waiver of fees. An owner whose income of his family is at or below the 1988 Poverty Income Guidelines For All States (Except Alaska and Hawaii) And The District of Columbia established by the Department of Health and Human Services, 53 Fed. Reg. 4213 (1988), or

any successor guidelines, shall not be charged a fee for mandatory monitoring inspection of an alternative discharging sewage treatment system conducted by the Department of Health in accordance with 12VAC5-640-490 C, D, or E.

C. Determining eligibility.

1. An owner seeking a waiver of an inspection fee shall request the waiver in writing. The department will require information as to income, family size, financial status and other related data.
2. It is the owner's responsibility to furnish the department with the correct financial data in order to be appropriately classified according to income level and to determine eligibility for a waiver of an inspection fee. The owner shall be required to provide written verification of income such as check stubs, written letter from an employer, W-2 forms, etc., in order to provide documentation for the file.
3. The proof of income must reflect current income which is expected to be available during the next 12-month period. Proof of income must include: name of employer, amount of gross earnings, pay period for stated earnings. If no pay stub, a written statement must include the name, address, telephone number and title of person certifying the income.

**12VAC5-640-330. Suspension of an operation permit.**

A. Suspension. The district health director or district sanitarian manager may suspend the operation permit held by the owner of any discharging system which discharges effluent in violation of the effluent limitations set forth in the General Permit provided the following conditions have been met:

1. The owner has received written notification, either in person or by certified mail, of the violation at least seven working days prior to the suspension;
2. The owner has been advised of the nature of the violation and, if known, what actions are necessary to correct the violation;
3. The owner has been advised of his right to a hearing pursuant to 12VAC5-640-180 B to appeal the suspension of the operation permit;
4. The owner has taken no significant demonstrable action to identify and correct the problem causing the system to fail; and



5. The owner has been issued an emergency pump and haul permit, or given another alternative method of sewage disposal, at least 24 hours prior to the suspension of the operation permit.

B. Discharge suspended. Upon suspension of an operation permit the owner shall immediately cease discharging effluent until corrections have been made to the discharging system which may be expected to bring the system into compliance with this chapter. The owner shall demonstrate to the health department that interim sewage disposal methods are in compliance with all federal, state and local laws governing public health and the environment. When pump and haul is utilized to prevent a discharge from occurring, the owner shall comply with the emergency pump and haul requirements found in the Sewage Handling and Disposal Regulations (12VAC5-610-10 et seq.) and provide the local health department with the name, address and phone number of the hauler and the frequency of pumping prior to initiating the emergency pump and haul process.

C. Modifications, alterations, or extensions. In addition to the remedies under 12VAC5-640-330 A and B, when any individual discharging system has exceeded its permitted discharge limitations three times in any one year or five times in any two consecutive years, the district health director or district sanitarian manager may require modifications, alterations or extensions to the system in order to improve the effectiveness of the system.

#### **12VAC5-640-340. Reinstatement of an operation permit.**

Upon completion of repairs, modifications, alterations, or extensions to the discharging system, which may be reasonably expected to correct the cause of the violation, the department shall reinstate the operation permit. Upon reinstating the operation permit, the pump and haul permit shall be rescinded. The notice of reinstatement of the operation permit and rescinding of the pump and haul permit shall be made in writing and delivered in person or by certified mail.

#### **12VAC5-640-350. System approval.**

Discharging systems will be classified by the division according to the data available to indicate the performance limits and reliability of various discharging systems. Systems may be classified as having an experimental system approval, a preliminary system approval, or a general system approval. The type and frequency of testing for each class of approval is designed to reflect the certainty with which the system has demonstrated its ability to meet the limits of the General Permit. Approval of generic system designs or of individual proprietary systems will be made by the division.

A. Experimental system approval. Experimental system approval indicates that a system, process, technology, or design has not been rigorously tested and proven capable of meeting either the discharge limits of the General Permit or the standards for Class 1 systems as defined by ANSI/NSF (American National Standards Institute/National Sanitation Foundation) International Standard 40, revised July 1990 ("Standard 40") hereby incorporated by reference. Products which have not been field tested or demonstrated in use as described in 12VAC5-640-350 B or C shall be considered experimental.

1. Notification of owner. All owners proposing experimental discharging systems shall sign a waiver of liability relieving, and agreeing to indemnify, the Department of Health and its employees for all liability associated with the design, operation, and performance of the system. Further, the owner shall agree to replace the experimental system with a system that has either general approval or preliminary approval in the event the experimental system fails and cannot be repaired. The cost of all repairs to, or replacement of, any experimental system shall be the responsibility of the system owner and shall not lie with the department.
2. Limit of 25 systems. A maximum of 25 experimental discharging systems of any one type or design may be installed at any one time in the Commonwealth.
3. Time limit for experimental system status. Experimental approval shall not extend for more than 18 months after the 15th experimental system of one type or design has been installed. After 18 months the experimental process, technology or design shall be reviewed by the division and either granted preliminary system approval or the experimental approval shall be revoked. Preliminary system approval shall be granted if the system complies with the requirements of 12VAC5-640-350 B 1 c.

B. Preliminary system approval. Preliminary approval of a particular model of a discharging system indicates that the specific model uses a method, technology, process or combination of methods, technologies or processes that has been demonstrated in full scale systems under controlled test conditions. The results of these tests indicate that the system may have the potential to treat residential sewage under actual residential conditions to the level required by the General Permit. Demonstrated in situ performance, to the level of treatment required by the General Permit, is necessary to maintain system approval.

1. A discharging system may receive preliminary system approval by one of three methods:

a. ANSI/NSF testing. A system may be tested by an entity accredited by the American National Standards Institute and demonstrated to comply with Standard 40; or

b. Accepted engineering practice. System designs such as intermittent dosed sand filters, recirculating sand filters, and other system concepts which use design concepts and loading rates proven in accordance with accepted industry standards and practices and which have been routinely used and have associated test results meeting or exceeding those required for experimental systems to receive preliminary approval, may be granted preliminary approval by the division; or

c. Successful experimental system testing. A system may receive preliminary system approval by successfully demonstrating as an experimental system it can meet the following requirements:

(1) Replicates. At a minimum 15 systems of the same type or design shall be tested under residential conditions for a minimum period of one year each (i.e., no individual system shall be tested for less than one year);

(2) Data collection. Data shall be collected and reported to the Division for each system in accordance with the requirements of 12VAC5-640-490; and

(3) Results. The data shall demonstrate that during the previous year, not less than 95% of all systems of any one type or design were functioning properly during any quarter. That is, during the previous one year there were no data indicating the need to suspend the preliminary system approval.

2. Time limit for preliminary system approval. Preliminary system approval shall not extend for more than 60 months after the 25th preliminary system of one type or design has been installed. After 60 months the preliminary system approval status shall be reviewed by the division and the system either granted general system approval or the preliminary system approval shall be revoked. General system approval shall be granted if the system complies with the requirements of 12VAC5-640-350.

C. General system approval. Systems that have demonstrated in actual residential use that they can consistently meet the limits of the General Permit shall be eligible for general system approval. To meet the intent of this section the system shall meet the following requirements:

1. Replicates. At a minimum 25 systems shall be tested under residential conditions for a minimum period of five years each (i.e., no individual system shall be tested for less than five years);
2. Data collection. Data shall be collected and reported to the district health department for each system in accordance with the requirements of 12VAC5-640-490; and
3. Results. The data shall demonstrate that during the previous five years, not less than 95% of all systems of any one type or design were functioning properly during any quarter. That is, during the previous five years there were no data indicating the need to suspend the preliminary system approval. All systems installed and tested at the time of evaluation shall be included in the review. Nothing shall limit the department to basing its evaluation only on the first 25 systems installed.

**12VAC5-640-360. Product registration.**

All aerobic treatment units shall be registered with the Division of Sanitarian Services in order to receive preliminary approval. In order to register a product, the manufacturer shall submit documentation showing the results of the Standard 40 testing and detailed plans and specifications of the product. Detailed plans and specifications shall include at a minimum a plan view of the ATU, a cross section of the ATU and any supplementary views which together with the specification and general installation guidelines will provide sufficient information for sanitarians to issue permits.

A. Health department review. The Division of Sanitarian Services will review requests for preliminary approval within 30 work days of receipt and respond to the applicant in writing. The department may approve, deny, conditionally approve, or request additional information on any request. When additional information is requested the division shall respond to the additional information within 30 days of receipt.

B. Certification mark or seal. All Class I ATU's in compliance with ANSI/NSF International Standard 40 shall have a registered certification mark or seal which must be affixed in a conspicuous location on the unit.

**12VAC5-640-370. Submission of plans.**

A. Intermittent sand filter. All plans for an intermittent sand filter must use a design prepared by a professional engineer licensed to practice in Virginia, except for generic system designs which have been approved by the division. All plans and specifications shall bear the name, address, and occupation of the author and date of design.

B. Recirculating sand filter. All recirculating sand filters must use a design prepared by a professional engineer licensed to practice in Virginia, except for generic system designs which have been approved by the division. All plans and specifications shall bear the name, address, and occupation of the author and date of design.

C. Constructed wetlands. Constructed wetlands are considered experimental and will be considered on a case by case basis by the department. All constructed wetland systems shall be designed to meet or exceed 10 mg/l BOD<sub>5</sub> and 10 mg/l suspended solids.

**12VAC5-640-380. Suspension and revocation of system approval.**

A. General. The experimental and preliminary approval of systems cited in 12VAC5-640-350 is based on the capability, or theoretical capability, of a particular method, technology or design to treat sewage under controlled conditions. Designs having general system approval have demonstrated their ability to meet the discharge limits of the General Permit; however, these systems still require routine maintenance and attention to their proper use such that they operate in a safe and sanitary manner. In order to protect public health and the environment, these systems must also be capable working properly under normal field conditions.

B. Suspension of approval. Anytime more than 5.0%, as measured statewide, of the discharging systems of any approved generic system or of any approved proprietary system design are found to be failing for two consecutive quarters, the approval of that design or model shall be suspended. Failure for the purposes of this section means the discharge of effluent that does not meet the effluent limitations set forth in the State Water Control Board's General Permit for all constituents except residual chlorine and dissolved oxygen.

1. When less than 100 systems of a single design have been installed, Table 2.1 shall be used determine the maximum acceptable failure rate. The 5.0% rule shall not apply because a small number of failures, or even a single failure, may violate this percentage without unduly endangering public health or the environment.

2. When the approval of a system has been suspended, no additional systems of that design or model shall be installed or approved unless construction or installation is already in progress and the system or materials to construct the system are already on the job site.

TABLE 2.1

| Number of systems<br>Installed in VA | No. not to exceed<br>for suspension | No. not to exceed<br>for revocation |
|--------------------------------------|-------------------------------------|-------------------------------------|
| 0-10                                 | 1                                   | 3                                   |
| 11-25                                | 2                                   | 6                                   |
| 26-50                                | 3                                   | 9                                   |
| 51-75                                | 4                                   | 12                                  |
| 76-99                                | 5                                   | 15                                  |

C. Reinstatement of approval for a suspended system. The approval of a system under suspension may be reinstated by the division after the following conditions have been met:

1. Repairs have been made to all failing systems, and
2. Follow-up testing, performed in accordance with 12VAC5-640-490 D 1, reveals that less than 2.0% of the systems are failing. When less than 100 systems have been installed, approval may be reinstated when repairs and testing as described above has been completed on all failing systems and the number of failures is less than that shown in Table 2.1.

D. Revocation of approval. Anytime more than 15%, as measured statewide, of the discharging systems of any approved generic system or of any approved proprietary system design are found to be failing for two consecutive quarters, the approval of that design shall be revoked. Failure for the purposes of this section means the discharge of effluent that does not meet the effluent limitations set forth in the State Water Control Board's General Permit for all constituents except residual chlorine and dissolved oxygen. Further, the division shall revoke the approval of any Class I ATU which fails to meet Standard 40 upon retesting for continued certification, when such testing has been performed by NSF or other third party which has been accredited by the American National Standards Institute.

1. When less than 100 systems of a single design have been installed, Table 2.1 shall be used determine the maximum acceptable failure rate. The 15% rule shall not apply because a small number of failures, or even a single failure, may violate this percentage without unduly endangering public health or the environment.

2. When the approval of a system has been revoked, no additional systems of that type shall be installed or approved.

E. Reinstatement of a revoked system. The approval of a system that has had its approval revoked may be reinstated by the division after the following conditions have been met:

1. Design flaws which led to the excessive failure rate have been corrected;

2. Repairs have been made to all systems to correct the design flaws;

3. Follow-up testing, performed in accordance with 12VAC5-640-490 D 1 reveals that less than 2.0% of the systems are failing. When less than 100 systems have been installed, approval may be reinstated when repairs and testing as described above has been completed on all failing systems and the number of failures is less than that shown in Table 2.1; and

4. Retesting and recertification of any Class I ATU under Standard 40.

F. Notification by the department. When the approval for a system is suspended, or is revoked, the department will send notice of the suspension to all regional and district offices of the Health Department, the manufacturer (if applicable), and other interested parties who have notified the department in writing that they wish to be notified. The notice shall include the system name, failure rate, location of failing systems and what actions are necessary to return to an approved status.

Part III  
Location, Design, Construction, Operation and Maintenance Criteria  
Article 1  
Site Requirements

**12VAC5-640-390. General.**

All discharging systems shall be located so that the treatment system, the point of discharge, all appurtenances, and the effluent leaving the system are sited in a manner that protects public health and minimizes environmental impacts.

**12VAC5-640-400. Classifications of discharge point.**

The nature of the discharge point will determine what precautions must be taken to protect public health and environmental resources. These regulations identify two classifications of discharge points.

A. All weather stream required if possible. The preferred point of discharge is an all weather stream where effluent can be readily diluted at least 10:1 as measured during a 7 consecutive day average of a 10 year low flow (7-Q-10) and thereby minimize public health and water quality impacts. Where an all weather stream is available for use it shall be used rather than discharging to an intermittent stream or dry ditch.

B. Stream type identification on USGS maps. An all weather stream may generally be identified by a solid blue line on the most recently published 7.5 minute United States Geologic Survey (U.S.G.S.) topographic map. The site evaluation shall include a review to verify that the stream is flowing at the time of the site evaluation. The USGS map shall not be the sole and final factor used to determine if a stream is an all weather stream when the department observes otherwise. Intermittent streams may be identified by a dotted and dashed blue line on the most recently published 7.5 minute United States Geologic Survey topographic map.

C. Other means of determining stream flow. An owner may submit to the division additional hydrologic data, including but not limited to stream records and anecdotal evidence of long time residents, to support that a stream can provide a dilution ratio of 10:1. When in the opinion of the division, the evidence warrants a change, the division may determine that a stream is an all weather stream for the purposes of this chapter.

D. Intermittent streams or dry ditches. Discharges into intermittent streams or dry ditches which do not have the dilution capability cited in 12VAC5-640-400 A shall be located entirely within the owner's property, or within a recorded easement as described in 12VAC5-640-450 B or a combination of the two.



1. Average slope. The average slope for any intermittent stream or dry ditch discharge receiving effluent from a discharging system shall be between 2.0% and 30% for the first 500 feet from the point of discharge.
2. Minimum slope. In order to prevent ponding, the minimum slope shall not be less than 1.0% at any point.
3. Grading of slopes. All slope measurements described in subdivisions 1 and 2 of this subsection shall be made prior to initiating any grading and are intended to reflect naturally occurring swales and drainage ways. Nothing contained herein however, is intended to prohibit a property owner from making minor grading improvements to prevent ponding in areas with minimal slopes.

**12VAC5-640-410. Subdivisions.**

Discharging systems may be permitted in existing subdivisions in accordance with this chapter.

No discharging system shall be permitted in any subdivision created after July 30, 1992, when a central sewer system is available or may be permitted to serve the subdivision. If the SWCB determines that no central sewage facilities are reasonably available or may be permitted, and each proposed site is eligible for registration under the General Permit, then the locality, in which the proposed subdivision is located, may request that the department review the plan for compliance with this chapter. When subdivisions are proposed utilizing individual discharging systems and dry ditch discharges, the use of easements shall be prohibited for multiple systems discharging to a single dry ditch or intermittent stream unless the owner(s) take necessary action to prevent access by children, animals, or other vectors.

**12VAC5-640-420. Setback distances.**

A. Water supply intakes and recreational uses. Discharges proposed within one mile (upstream or up channel) of any public water intake or one mile (upstream or up channel) of any area explicitly designated for public swimming shall not be permitted. When any river, stream, or other potential discharge area appears to receive significant primary contact use, such as, but not limited to, swimming, water skiing, tubing, or wet-wading, so that the discharge will pose a significant threat to public health or create a nuisance, the district health director may prohibit discharges into specified portions of the river, stream, or other potential discharge area. Prior to taking such action, the health director shall take the following steps:

1. Publish a notice announcing the department's intention to consider areas for restricting the use of discharging systems, establishing the date, time and location(s) of

the public meeting(s), and soliciting public comment on the proposed area or areas being reviewed;

2. Request the opinion of the local governing body and other appropriate government agencies concerning proposed restrictions to be submitted before the close of the public comment period;

3. Have a public comment period on the proposal of not less than 30 days;

4. Hold at least one public meeting, 30 days or more after publication of the notice specified in subdivision 1 of this section; and

5. Evaluate the public comments received and staff evaluations regarding the use of the proposed area or areas for primary contact uses.

When in the best professional opinion of the health director the area or areas under consideration receives, for 30 days or more per year, significant primary contact uses, such that the discharge will pose a significant threat to public health or create a nuisance, the director may designate areas where discharge systems are prohibited. Prohibited discharge areas may include areas upstream in the main channel and tributaries, from the area under review, for distances up to one mile if warranted by the evidence. Prohibited discharge areas shall be clearly defined in writing and delineated on a United States Geological Survey 7.5 minute topographic map. The prohibition on discharges, if any are found necessary, shall be effective upon notice after completion of the elements contained in this section.

B. Private and public water supplies. The treatment system (ATU, sandfilter etc.), discharge point and the channel of treated effluent flow shall be located in accordance with the distances given in Table 3.1 from private and public water supplies. The set back distances between the water supply and the downstream channel established in Table 3.1 shall apply for 50 feet downstream of the discharge point for all weather streams and 500 feet downstream for intermittent stream or dry ditch discharges.

C. Springs. No discharging system nor any portion of the channel carrying the treated effluent flow shall be within 100 feet of a spring. Further no discharging system shall discharge within 1,500 feet upstream or 100 feet downstream of any spring used for human consumption.

D. Sink holes. Discharging systems are prohibited from discharging into sink holes, streams or other waterways that flow into sink holes within 1,500 feet from the point of discharge, and dry ditches that flow into sink holes within one mile from the point of discharge.

E. Limestone outcrops. Dry ditch discharges to swales or drainage ways which have limestone outcrops within 25 feet of the dry ditch channel bottom are prohibited. This provision shall apply for the entire distance required for ownership or easement in 12VAC5-640-450 B.

F. Proximity to other discharge points. The department will not approve discharging systems except where discharge points will be at least 500 feet apart. If the proposed system utilizes aerobic biological treatment followed by sand filtration this distance may be reduced to 250 feet apart.

G. Shellfish waters. No discharge shall be permitted under this chapter which will result in the condemnation of shellfish waters or the continued condemnation of shellfish waters closed only because of inadequate water quality.

TABLE 3.1 SETBACK DISTANCES FROM PRIVATE AND PUBLIC WATER SUPPLIES  
(All distances are in feet)

| Type of Water Channel<br>Supply Stream | Point of<br>Discharge | Downstream Channel<br>With 7-Q-10 | Downstream<br>Intermittent or Dry Ditch |
|--|-----------------------|-----------------------------------|---|
| Class II <sup>1</sup>                  | 100                   | 100                               | 100                                     |
| Class IIIA                             | 50                    | 50                                | 50                                      |
| Class IIIB                             | 50                    | 50                                | 50                                      |
| Class IIIC                             | 100                   | 50                                | 100                                     |
| Class IV                               | 100                   | 25                                | 50                                      |
| Cistern                                | 100                   | 50                                | 100                                     |

<sup>1</sup>Class II well specifications are found in the Waterworks Regulations. All other well specifications may be found in the Private Well Regulations.

## Article 2

### Design Requirements

#### **12VAC5-640-430. Performance requirements.**

A. Discharge limits. All systems operated under this chapter shall meet the effluent limitations set forth by the State Water Control Board in the General Permit.

B. Bypass flow. No system shall be approved for use which provides a bypass pipe, or otherwise allows untreated or partially treated effluent to discharge in the event of a system failure.

#### **12VAC5-640-440. Factors affecting system design.**

Each type of discharging system has its own unique advantages and disadvantages. These unique characteristics define the situations where a system may be used to advantage. The design of the system must be appropriate for the intended use and the site conditions where it is placed.

A. Discharge to a dry ditch or intermittent stream. When a discharge is proposed to a dry ditch, the department shall require restricted access to the dry ditch or intermittent stream to protect public health.

B. Intermittent use. Intermittent use for the purposes of this chapter constitutes use of the system for less than three consecutive months. Systems serving weekend cottages, or other intermittent uses will not reliably treat effluent prior to discharge. Therefore, the use of discharging systems for dwellings subject to intermittent use is prohibited.

C. Infiltration. When a discharging system is proposed to be located in an area subject to infiltration by surface water or shallow ground water, the department may require additional protection from infiltration, including placement of the system above natural grade.

D. Erosion. Erosion must be controlled by the owner of the discharging system in accordance with any local erosion control ordinances or the Soil Conservation Services recommendations.

E. Sewage design flows. All systems shall normally be designed to treat the BOD<sub>5</sub> loading rate of 0.4 lbs/day per bedroom for systems up to three bedrooms. Systems serving single family dwellings having more than three bedrooms shall be permitted and designed to treat the anticipated loading rate based on BOD<sub>5</sub> and be capable of handling anticipated peak loading rates. When a system is permitted with a design less than the maximum capacity of the dwelling, the owner shall have the construction permit recorded and indexed in the grantor index

under the owner's name in the land records of the clerk of the circuit court having jurisdiction over the site of the discharging system.

**12VAC5-640-450. Criteria for the use of intermittent streams or dry ditches.**

All owners of systems discharging to an intermittent stream or dry ditch shall ensure the following conditions are met:

1. Restricted access. Direct contact between minimally diluted effluent and humans must be restricted for the life of the system. This will be achieved by reducing the chance of ponding and run-off and limiting access to the effluent. The department shall require fencing, rip-rap, or other barriers to restrict access to effluent discharging to a dry ditch or intermittent stream as deemed necessary to protect public health. This determination shall be made by the district health director or district sanitarian on a case by case basis. The restricted access area shall begin at the point where the effluent is discharged and continue for 500 feet or until the effluent discharges into an all weather stream.
2. Ownership and easements. When effluent is discharged to a dry ditch or intermittent stream, the owner shall either own the land or have an easement to discharge on all land below the point of discharge for the distance shown in Table 3.2. To allow for construction and repair of the restricted access area, as well as to facilitate monitoring, the width of the easement shall be 25 feet on either side of the low point of the dry ditch or intermittent stream for the entire length of the restricted access area. All easements must be in perpetuity and shall be recorded with the clerk of the circuit court prior to issuance of the construction permit. For the purposes of complying with this chapter, a CE-7 permit issued by the Virginia Department of Transportation shall be considered as equivalent to an easement in perpetuity recorded by the clerk of the circuit court.

TABLE 3.2  
 REQUIREMENTS FOR OWNERSHIP OR EASEMENTS DOWNSTREAM FROM  
 DISCHARGING SYSTEMS

| Process   | Downstream or Down Channel Distance<br>(feet) |              |
|---|---|--------------|
|   | No spring below                               | Spring below |
| Sandfilter, aerobic system (w/post filtration), constructed wetland, or other single process system | 500'  | 1,500'       |
| Aerobic system w/sand filter, or other combination process with equal treatment                     | 250'  | 1,500'       |

3. Public health and environmental impact reduction and nuisance abatement. Each discharging system which discharges to a dry ditch or intermittent stream must receive additional treatment beyond that required by the General Permit in order to reduce the increased potential for public health and nuisance problems which may result when partially treated effluent is not diluted. Such additional treatment shall be capable of producing an effluent with a quality of 10 mg/l of BOD<sub>5</sub>, 10 mg/l of suspended solids and a fecal coliform level of less than or equal to 100 per 100 ml.

**12VAC5-640-460. Disinfection.**

All discharging systems shall be equipped with a means of disinfecting the effluent which is acceptable to the division.

A. All discharging systems utilizing chlorine as a disinfectant shall be equipped with a chlorinator and contact chamber. The chlorine contact chamber shall have a length to width ratio of 20:1 and shall be capable of maintaining a total chlorine residual between 1.0 mg/l and 3.0 mg/l in the effluent within the chlorine contact chamber for 30 minutes based on peak hourly flow, or 60 minutes based on peak daily flow. The length to width ratio may be reduced on a case by case basis when increased chlorine contact times are utilized.

B. All chlorine used to disinfect effluent from a discharging system shall be approved by the Environmental Protection Agency for use as a sewage disinfectant.

C. Other methods of disinfection for the removal of bacteria and viruses, which have been demonstrated effective under field use, may be approved by the division.

Article 3  
Construction Requirements

**12VAC5-640-470. Installation review.**

A. General. No portion of any system may be covered or used until inspected, corrections made if necessary, and approved, by the local health department or unless expressly authorized in writing by the local health department. All applicable sections contained in the Sewage Handling and Disposal Regulations, 12VAC5-610-10 et seq., shall be used to establish design and construction criteria not contained in this chapter.

B. Slope. Gravity sewer lines and lines between components of the system shall be schedule 40 pipe and shall have a minimum grade of 1.35" per 10' for 3" and 4" sewer lines. Discharge lines after primary or secondary treatment units shall have a minimum grade of 6" per 100'. Where minimum grades cannot be maintained, detailed pump specifications shall be shown on the site plan in accordance with Article 4 of Part IV of the Sewage Handling and Disposal Regulations, 12VAC5-610-10 et seq.

C. Location. The treatment unit and all piping and appurtenances shall be located in conformance with the approved plans. All changes in location shall be approved by the local department prior to the installation of the system.

D. Pumps. All pumps and appurtenances to the pump shall be installed according to the plans and specifications approved by the department and referenced in the permit.

E. Electrical. All wiring shall be approved by the local building official and shall be weather tight and permanent in nature (hard wired).

F. Controls. The control panel for the system shall be located within 15 feet of the treatment unit and shall be provided with a manual override switch. Each pumping station shall be provided with controls for automatically starting and stopping the pumps based on water level. When float type controls are utilized they shall be placed so as to be unaffected by the flow entering the wet well.

G. Alarm. All mechanical treatment units shall be provided with an alarm system on a separate electrical circuit from the remainder of the treatment unit. The alarm shall be both audio and visual and shall be located in an inhabited portion of the dwelling.

All ATU's shall be equipped with an alarm that detects aerator failure and a high water alarm to warn against the back-up or overflow of sewage.



H. Flood plain. Except for the discharge pipe, and step type post aeration if required, no portion of the discharging system may be located in the 100-year flood plain.

I. Sampling ports. All discharging systems shall be equipped with a six-inch (or larger) sampling port connected to an approved effluent collection box at the chlorine contact chamber after the 30- or 60-minute contact time (i.e., the sampling port shall be located at the outlet end of the chamber. Additionally, a separate sampling port shall be required after the dechlorination unit. Other sampling ports may be required elsewhere on a case by case basis as required by the system design.

J. Clean out port. All discharging systems shall have a clean out port, accessible from the surface of the ground within 10' of the influent invert of the treatment unit.

K. Ventilation. Positive ventilation shall be provided at pumping stations when personnel are required to enter the station for routine maintenance.

L. Filter liners. Sand filter liners shall be constructed of clay having a permeability of  $10^{-6}$  cm/sec. or less, a 28 mil vinyl or PVC plastic liner, concrete, or other material approved by the division. A watertight seal shall be provided where underdrain piping exits the filter.

M. Filter materials. Sandfilter materials shall meet the specifications described in 12VAC5-580-760 B of the Sewerage Regulations, or as amended.

N. Posting of discharge pipe. The owner of each discharging system that discharges to state waters, including either an all weather stream or an intermittent stream, shall post a sign with the following notice: This pipe carries treated sewage effluent and is not suitable for human consumption. This system is owned by (FULL NAME OF PERMIT HOLDER) and is maintained by (NAME AND PHONE NUMBER OF MAINTENANCE PROVIDER IN MAINTENANCE CONTRACT). The sign shall be posted within three feet of the discharge pipe and shall be plainly visible to the public. All lettering shall be at least one-inch high and shall be clearly legible. The sign shall have black letters on a white background (or be painted in other contrasting colors) and be plainly visible at a distance of 25 feet to a person with normal vision. Failure to maintain this sign shall be grounds for suspending the owner's operation permit.

#### **12VAC5-640-480. Compliance with plans.**

Prior to the issuance of an operation permit all discharging systems must be inspected by the health department and found to substantially comply with the intent of the chapter. Minor deviations from the permit or proposed plans and specifications (excluding the manufacturer's design and installation specifications) that do not affect the quality of the sewage treatment process or endanger public health or the environment may be approved. Where engineering

plans were submitted and were incorporated in the construction permit, the design engineer, or other professional engineer designated by the design engineer, shall inspect the installation and submit written comments concerning the compliance of the installation with the design specifications prior to the issuance of the operation permit.

## Article 4

### Monitoring and Maintenance Requirements

#### **12VAC5-640-490. Monitoring.**

A. General. Discharging systems that discharge improperly treated effluent can endanger public health and threaten environmental resources. All discharging systems shall be routinely inspected and the effluent sampled to determine compliance with the effluent limitations set forth by the State Water Control Board in the General Permit. All testing requirements contained in this chapter are the responsibility of the system owner to have collected, analyzed, and reported to the department.

B. Types of testing. There are two types of testing recognized by this chapter: formal compliance testing and informal testing. Formal testing is conducted to determine either compliance or noncompliance with this chapter. Informal testing is conducted to determine compliance with this chapter and to determine when additional formal compliance testing is necessary. Informal testing may support but shall not be the sole basis for suspending an operation permit pursuant to 12VAC5-640-330 or to suspend or revoke the approval of the system pursuant to 12VAC5-640-380 of this chapter.

1. Formal compliance testing. Effluent from all discharging systems shall be tested for the following parameters at a frequency specified in Table 3.4: Five-day biochemical oxygen demand (BOD<sub>5</sub>), total suspended solids, fecal coliform bacteria, dissolved oxygen and total chlorine residual (measured at the outfall and in the chlorine contact chamber if dechlorination is required). The tests shall be analyzed by a laboratory certified by the E.P.A. or the SWCB to conduct self-monitoring analysis to determine compliance limits for VPDES permit discharge limits. Samples shall be collected, stored, transported and analyzed in accordance with requirements set forth in Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act as published in 40 CFR Part 136 (July 1, 1991).

2. Informal testing. The following tests will be conducted on the effluent, except as noted, at a frequency specified in Table 3.4; 30 minute settleable solids (conducted on the mixed liquor suspended solids), odor, color, pH, and chlorine (after the chlorine contact chamber). In addition, systems requiring effluent dechlorination shall be tested for dechlorination at the point of discharge. These tests shall be run in the field during routine monitoring inspections. The criteria for satisfactory informal testing are contained in Table 3.3.

TABLE 3.3  
INFORMAL TESTING CRITERIA  
(FOR ALL CLASSES OF DISCHARGING SYSTEMS)

|                   |   |
|-------------------|---|
| Settleable solids | less than 65% (mixed liquor suspended solids)   |
| Odor              | Slight musky odor (MLSS not septic)   |
| Color             | less than 15 units (measured at outfall - no solids present)                              |
| pH                | Same as formal compliance test limits   |
| Chlorine          | 1.0 mg/1 3.0 mg/1 (measured after chlorinator)<br>None detected (measured at the outfall) |

C. Frequency of mandatory testing.

1. Formal compliance testing. Formal compliance testing as described in 12VAC5-640-490 B 1, shall be conducted at the frequency listed in Table 3.4 for all discharging systems for all constituents listed under 12VAC5-640-490 B 1. Additionally, formal compliance testing may be required anytime informal testing indicates a discharging system appears to be discharging effluent that exceeds the effluent limitations set forth in the State Water Control Board's General Permit. Compliance monitoring conducted pursuant to the SWCB General Permit requirements may be submitted for one of the mandatory tests to comply with this chapter.

2. Informal testing. Informal testing, as described in 12VAC5-640-490 B 2, shall be used as an inexpensive screening method to identify systems that are potentially in violation of the effluent limitations set forth in the State Water Control Board's General Permit. Informal testing shall be conducted monthly for at least six consecutive months beginning the second full month after the issuance of the operation permit. After a discharging system has met the permit limits for six consecutive months the testing shall be conducted at the frequency listed in Table 3.4.

TABLE 3.4  
FREQUENCY OF MANDATORY TESTING BEGINNING SIX MONTHS  
AFTER SYSTEM START-UP

| System Approval Testing   | Formal Testing             | Informal Testing |
|---------------------------|----------------------------|------------------|
| Experimental <sup>1</sup> | Quarterly <sup>2</sup>     | Monthly          |
| Preliminary               | Semi-Annually <sup>2</sup> | Quarterly        |
| General                   | Annually <sup>2</sup>      | Semi-Annually    |

<sup>1</sup>Testing on systems with experimental approval shall begin 3 months after installation and continue for 12 or more consecutive months. The initial sample testing at three months shall be formal testing and the formal testing shall continue quarterly from that time forward.

<sup>2</sup>Also see 12VAC5-640-490 D 1.

D. Nonroutine mandatory testing and inspection. The district health director or district sanitarian manager may require additional formal compliance testing or informal testing, or both, as necessary to protect public health and the environment. Additional testing shall be based on observed problems and shall not be implemented routinely on all discharging systems.

1. Anytime a discharging system is found to exceed the effluent limitations of the General Permit, follow-up formal compliance testing shall be repeated between 45 and 90 days after the original samples were collected and the results reported to the local health department. This follow-up formal compliance testing shall constitute a subsequent consecutive quarter for the purposes of determining compliance with 12VAC5-640-380 B and D.

2. Anytime an informal test reveals an apparent problem, additional formal or informal testing may be conducted to review the effectiveness of any repairs or adjustments.

3. Anytime the results of two consecutive formal compliance tests as specified in 12VAC5-640-490 B 1 result in a violation of the effluent limitations of the General Permit, informal testing shall revert to monthly frequency until satisfactory results are obtained for six consecutive months. Nothing in this section shall preclude requiring the collection of samples for formal compliance testing as described in 12VAC5-640-490 B 1

and C 1 to determine compliance with the effluent limitations set forth in the General Permit.

E. Responsibility for testing. The owner of each system is responsible for ensuring that the collection, analysis, and reporting of all effluent sample tests are completed in a timely fashion and in accordance with 12VAC5-640-490 and 12VAC5-640-510. In addition to the mandated testing requirements contained in this chapter, the department shall conduct, at a minimum, an annual inspection, which may include formal or informal testing at the option of the department. Nothing contained herein shall be construed to prohibit the department from mandating additional formal and informal testing as deemed appropriate by the department. Further, the department at its discretion may require split samples be collected at any time (i.e., for routine or nonroutine testing).

F. Monitoring contract. In order to assure monitoring is performed in a timely and competent fashion, the owner of each system shall have a contract for the performance of all mandated sampling with a person capable of performing the sampling and analysis of the samples. This requirement may be met by including the performance of all testing and monitoring as part of the maintenance contract in accordance with 12VAC5-640-500 C 1. Failure to obtain or renew a monitoring contract shall result in the suspension or revocation of the operation permit as described in 12VAC5-640-280. When the district health director or the sanitarian manager find that the homeowner is capable of collecting and transporting samples to an approved laboratory in compliance with this chapter, the requirement for having a valid monitoring contract may be waived. Waiving of this requirement shall be done only on an individual basis and shall reflect the competency of the individual based on profession, training or other educational experience. In the event the individual for whom this section is waived fails to collect three or more of any of the required samples in any five-year period, the district sanitarian or the health director may reinstate the requirement for a monitoring contract.

#### **12VAC5-640-500. Maintenance.**

A. General. Due to the potential for degrading surface water and ground water quality or jeopardizing the public health, or both, routine maintenance of discharging systems is required. In order to assure maintenance is performed in a timely manner a maintenance contract between the permit holder and a person capable of performing maintenance is required.

B. Maintenance contract. A maintenance contract shall be kept in force at all times. Failure to obtain or renew a maintenance contract shall result in the suspension or revocation of the operation permit as described in 12VAC5-640-280. The operation permit holder shall be

responsible for ensuring that the local health department has a current copy of a valid maintenance agreement. When a maintenance contract expires or is canceled or voided, by any party to the contract, the owner shall report the occurrence to the local health department within 10 work days.

C. Elements of a maintenance contract. At a minimum each maintenance contract shall provide for the following:

1. Performance of all testing required in 12VAC5-640-490 B, unless the owner maintains a separate monitoring contract in accordance with 12VAC5-640-490 F.
2. Full and complete repairs to the system within 48 hours of notification that repairs are needed. Any deductible provision in a maintenance agreement shall not exceed \$500 in any given year for repairs (including parts and labor).
3. Twenty-four months of consecutive coverage shall be the minimum time period a maintenance contract may be valid.

D. Public utility. In localities where a public service authority, sanitary district, or other public utility exists which monitors or maintains the systems, or monitors and maintains the systems, permitted under this chapter, the requirements for the monitoring or maintenance contract or both may be waived by the division provided the owner of the system subscribes to the service and the utility meets the minimum elements described in 12VAC5-640-490 and 12VAC5-640-500.

E. Qualifications to perform maintenance. In order to competently evaluate system performance, collect and interpret sample results, as well as repair and maintain discharging systems, an individual must be knowledgeable in sewage treatment processes. Therefore, after July 1, 1994, all individuals who perform maintenance on discharging systems pursuant to 12VAC5-640-500, are required to hold a valid Class IV wastewater works operator license issued by the Board for Waterworks and Wastewater Works Operators. Until July 1, 1994, individuals that can demonstrate two years of practical experience with discharging systems, with flows under 1,000 GPD, may conduct maintenance on all systems.

**12VAC5-640-510. Information to be reported.**

A. Who is responsible for reporting. All owners issued an operation permit for a discharging system are responsible for reporting the results of all mandated testing to the department.

B. What must be reported. All formal compliance testing, informal testing, repairs, modifications, alterations, expansions and routine maintenance must be reported.

C. When reports are due. All reports and test results must be submitted within 15 working days of the sample collection.

D. Where to report results. All reports and test results shall be submitted to the local or district office of the health department. When formal testing indicates a discharge limit established in the General Permit is being exceeded or when informal testing indicates a discharging system may be in violation of the General Permit requirements, the maintenance provider shall be notified by the owner within 24 hours.

**12VAC5-640-520. Failure to submit information.**

Failure to conduct mandatory monitoring or to report monitoring results as required in 12VAC5-640-490 and 12VAC5-640-510 may result in the suspension or revocation of the owner's operation permit.